



Vapormatt

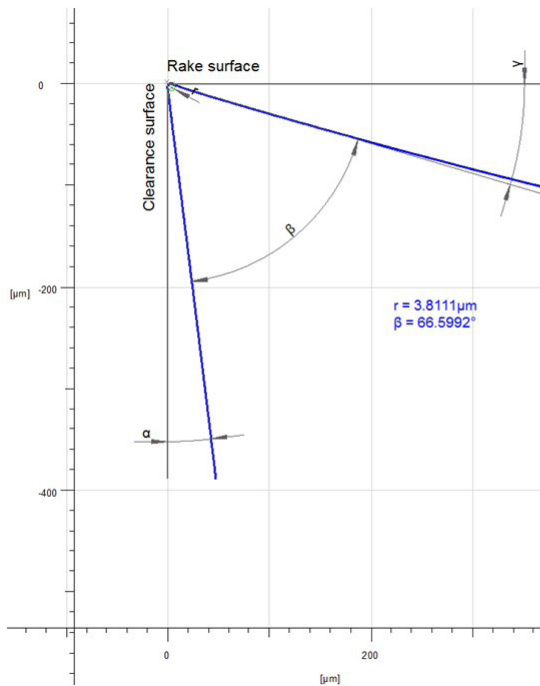
Bandsaws

Peening, honing and cleaning –
the wet blasting approach to
flawless bandsaw blades

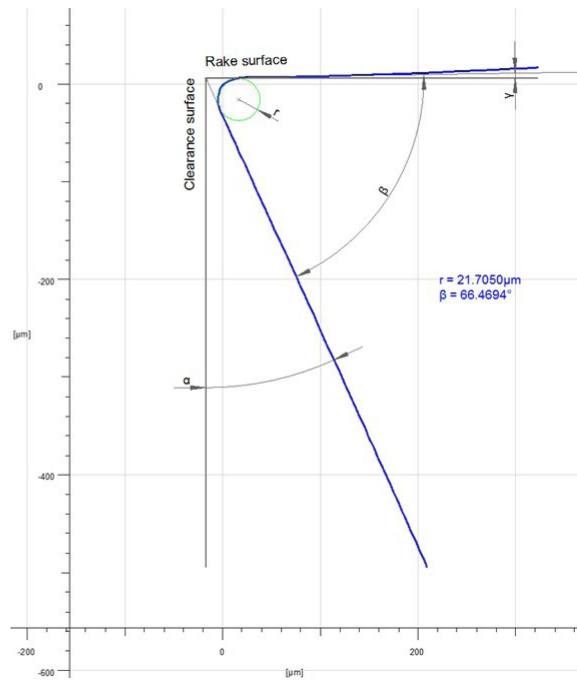
Vapormatt | Bandsaws

The bandsaw blade production process results in sharp cutting teeth that can become damaged if immediately used to cut harder materials at speed. If left like this, your customers could perceive your bandsaw blades as being of poor quality, ultimately damaging your brand.

Wet blasting can apply a defined edge hone to your bandsaw blade's cutting teeth with unparalleled levels of control and accuracy. This results in a product that doesn't need running-in and can be immediately used at full production speed.



Before wet blasting



After wet blasting

The bandsaw benefits at a glance

Process	Advantage	Benefit
Edge Honing	Wet blasting produces a very controllable, repeatable, and accurate surface preparation.	The saw can be run at full speed from new, without the need for breaking in, enhancing the quality perception of the blade and preventing any drops in production speed. Suppliers can charge for a premium longer-lasting product.
Peening	Strengthens the gullet between the saw teeth, the main cause of bandsaw blade fatigue and failure, by reducing tensile stresses and strain hardening the surface.	The removal of burrs and embedded media reduces the risk of complications for a patient outcome.
Cleaning	Removes burrs, heat marks and heat scale from the surface of the blade. Leaves a high-quality aesthetic surface finish. Leaves a clean very reactive surface perfect for high-quality printing of part numbers and brand logos. It also allows for excellent wet out and retention of oil to help prevent the oxidation of the blade.	High-quality cosmetic finish attracts premium selling prices. Allows for a high-quality print on a high-quality surface which reinforces the perception of a premium product. The product can retain its high-quality in storage for longer.

Edge honing bandsaw teeth by wet blasting at the microscopic level

Blade failures due to cracking from the gullet between the teeth is another serious quality issue that can be addressed by wet blasting. The peening [MA1] process relieves the tensile stresses that build up during production, resulting in strain hardening of the surface metal.

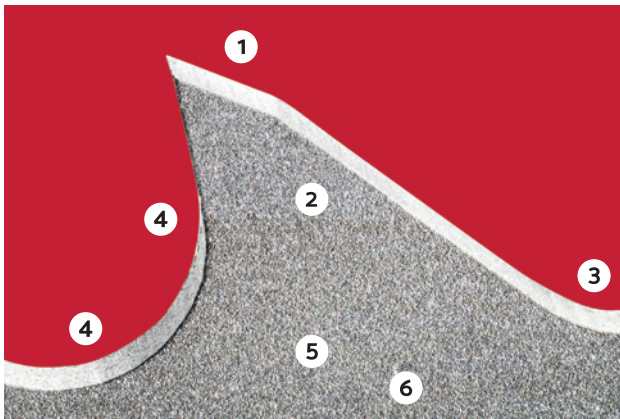
The cleaning operation performed by wet blasting removes any burrs, machining notches, heat marks and heat scale that may arise from production. While this process can be performed by dry blasting to a certain degree, wet blasting offers much higher standards of accuracy, quality, efficiency, and of course, removal of airborne dust.

Plus, the wet blasting process also creates high surface energy on the blade, leading to a far superior 'wet-out' than can be achieved with dry blasting – ideal for printing the saw blade's brand, or applying downstream anti-rust treatment to its surface.

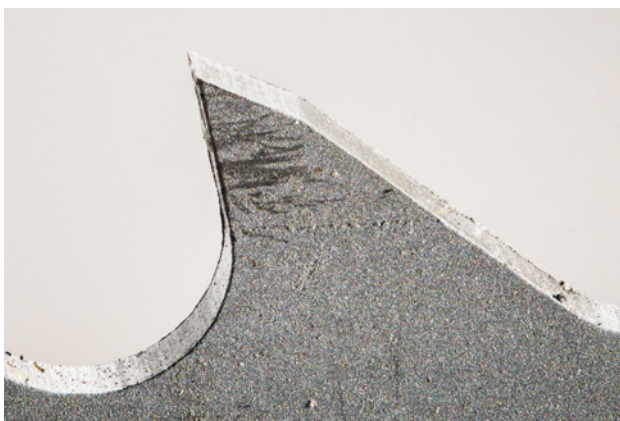
When it comes to honing and peening, nothing comes close to the effectiveness of wet blasting. With wet blasting, honing and peening can be delivered in-line with your existing production process, massively increasing productivity compared with dry blasting, for a rapid return on investment. And when you opt for wet blasting as your surface finishing method, you'll benefit from a far cleaner working environment with minimal dust created during the process, unlike dry blasting.

For the ultimate finish, the hot wash and dry rapidly removes any remaining abrasives and water, reducing the risk of water staining and corrosion, while preparing the blade for branding, application of anti-rust treatments and turning the saw blade back into a coil.

The benefits of wet blasting



- 1 Edge Honing of the teeth
- 2 Aesthetic enhancement
- 3 Removing burrs, cleaning heat marks and heat scale
- 4 Peening of the gullet and teeth braze points
- 5 Reactive surface for the application of the brand name and anti-rust treatments
- 6 Washed and dried, ready for inline branding, treating and packaging in-line or loop bandsaws



Pre-process



Post-process

Why work with us?

Vapormatt isn't just the world leader in wet blasting. We invented the process and remain solely focused on it to this day.

Since Norman Ives Ashworth developed the first wet blasting machines in the 1940s, we've been developing, improving and refining wet blasting for edge radiusing, surface preparation and peening. And we're still led by the Ashworth family today, continuing to design and manufacture bespoke machinery and after-market services built to the specific requirements of your cutting tool inserts business.

Our expertise spans many different sectors: from tooling carbide insert manufacturing, to stainless steel weld cleaning. Our breadth of knowledge means we can explore a wider range of applications that benefit a business like yours.

Because at Vapormatt, while we might be pioneers of wet blasting technology, we never believe the job is done. We're constantly researching, developing our techniques and discovering new technological enhancements that we can apply to cutting tool inserts. Consequently, we hold and have patent applications pending in significant areas of process control and repeatability.

When working with you, we'll build a long-term technical partnership, giving you access to our know-how and world-leading wet blasting services. As a result, we understand you may need us to develop methods and processes in confidence. You'll benefit from our discretion too – in fact, we have a long track record of doing just that with our key customers across a number of high-tech sectors.

What you can expect of us?

- **Integrity** - We always conduct business with you in a confidential, honest, open and ethical manner
- **Commitment** - Every member of our team aims to exceed your expectations at every level
- **Innovation** - We're at the forefront of wet blasting technology, implementing our technical expertise
- **Value** - You gain value from us through our high levels of service and technical excellence
- **Collaboration** - As a customer focused company, we work collaboratively to ensure you enjoy the best possible experience

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The Vapormatt Promise

In designing and manufacturing specialist machines that meet your exact requirements, we're always improving. Always refining. Always pushing the boundaries. We build on the successes of the past, incorporating proven designs and approaches, and combine them with innovative thinking to meet the specific challenges we face together with you.

Throughout that collaborative process, we're also completely honest and discreet. And it's in this respect that we make a promise to you.

As we develop more efficient, more seamless and more effective ways to deliver the benefits of wet blasting to you, any off-the-shelf solution is unlikely to be suitable. So complete validation of every design detail is practically impossible, and some functions – software, for example – will inevitably need modification as they're integrated into your processes.

Equally, once the equipment is installed on your premises, things are unlikely to be up and running without a glitch from the first moment, in a plug-and-play manner. Performance will always improve as operators and maintenance teams become familiar with the machines and their operation.

Other manufacturers might shy away from such an honest admission. However, we accept that this is simply part of building and refining the right wet blasting machines for you. That's why we promise to make the entire Vapormatt team, including our engineers, designers and sales specialists, available to offer advice, guidance and practical assistance once the equipment is installed and integrated in your workplace.

And we won't be satisfied until it's working to its full potential and this promise is kept.

The four pillars of our promise:

- To continuously improve the design and manufacture of our equipment
- To provide you with machines of the highest possible quality
- To support you in achieving optimal performance from your machines
- To collaborate with honesty and discretion